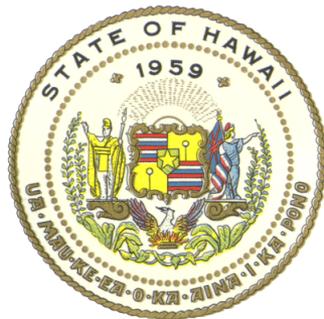


Transforming Government

*Through Business and Information Technology
(IT)/Information Resource Management (IRM)*

Sanjeev “Sonny” Bhagowalia
Chief Information Officer
April 25, 2012



State of Hawai'i
IMT



Organizational revival depends on the ability to adapt to environmental change



- **“We must become the change we want to see in the world” – Mahatma Gandhi**
- **“The journey of a thousand miles begins with a single step” – Lao Tzu**
- **“Automating a mess yields an automated mess” - Reengineering the Corporation, by Michael Hammer & James Champy, 1993**
- **“Information technology can expect to improve business process about 10%. However, redesigning a process and then adding technology can improve the process up to 90%” - Bill Gates, Business @ the Speed of Thought, 1999**
- **“The first rule of any technology used in a business is that automation applied to an efficient operation will magnify the efficiency. The second is that automation applied to an inefficient operation will magnify the inefficiency” - Bill Gates**
- **“Not everything that can be counted counts, and not everything that counts can be counted” - Albert Einstein (attributed)**
- **“What gets measured gets done, what gets measured and fed back gets done well, what gets rewarded gets repeated” - John E. Jones**
- **“The Problem is never how to get new innovative thoughts into your mind, but how to get old ones out” – Dee Hock, Founder and Former CEO of Visa**
- **“Innovation distinguishes between a leader and a follower” – Steve Jobs, Apple**



CIO Provides IT/IRM Leadership



- Develop, implement, and manage IT/IRM governance
- Establish and enforce policies and standards
- Create architectural requirements
- Provide statewide IT/IRM investment oversight



Source: <http://www.ndu.edu>

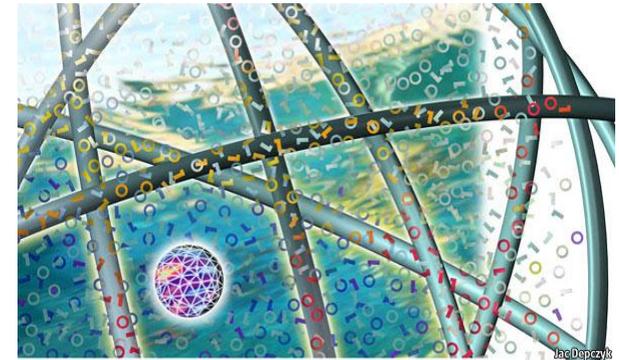
Source: <http://www.cio.gov>



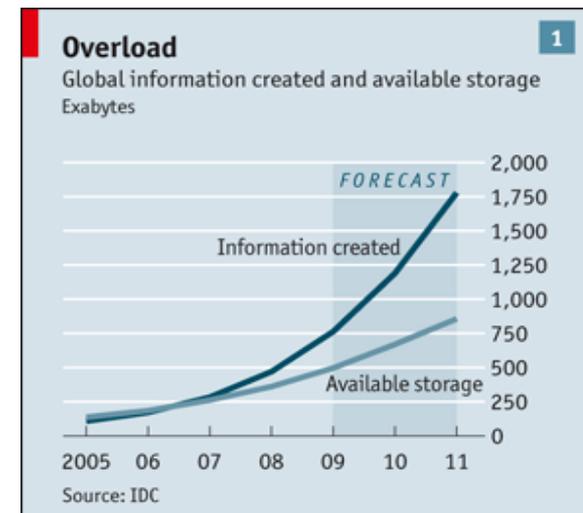
5 bold tech predictions: Fact or fantasy?

FCW (December 8, 2010)

1. 20% of businesses will own no IT assets by 2012 (Gartner)
2. One trillion devices will be connected to the Internet by 2013 (Cisco) – Current=35B
3. The government can save \$1 trillion in 10 years by harnessing certain proven technologies (Technology CEO Council)
4. 25% of personal computing devices sold will be tablets by 2015 (Forrester Research)
5. Data will grow by 800 percent in the next five years with 80% Unstructured Text and Media (Gartner)

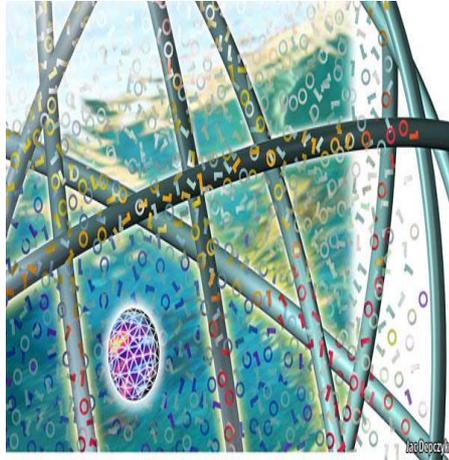


Volume of digital information increases tenfold every 5 years



And....the data is replicated many times over!

Context: Maximum sharing and flow of information and knowledge*

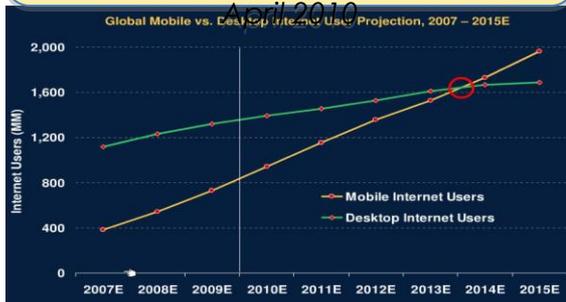


- YouTube is now **second largest search engine** in the world
- 1.5 million pieces of content shared **daily** on Facebook
- On-line newspaper readers are **up 30%**
- 250 million visitors **each month** to Myspace, YouTube, and Facebook (*none were around 6 years ago*)
- **Mobile devices** will be world's primary connection tool to the Internet in **2020**

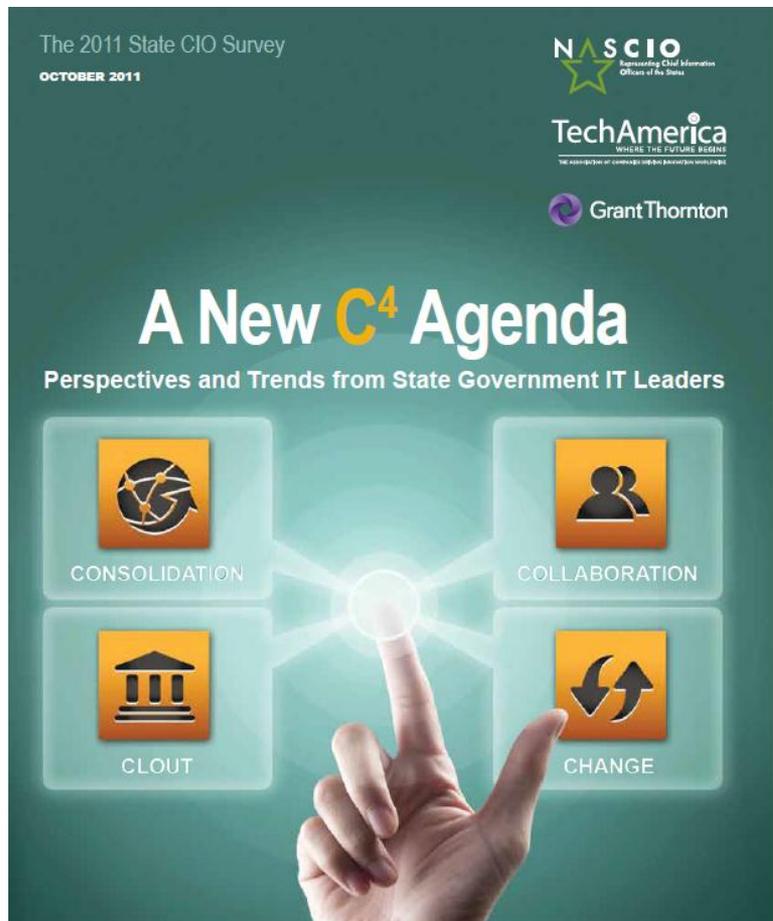
Mobile will be bigger than desktop internet in 5 years

-- Mary Meeker, Morgan Stanley,

April 2010



As big an issue *outside* your organization as *within* it



*<http://www.nascio.org/publications/>

39 Questions

- Roles & Governance
- Legislative Affairs & Advocacy
- Financial Management, Funding and Budget
- Collaboration
- Consolidation and Shared Services
- Cloud Computing
- Sourcing Strategies and IT Workforce
- Health Care
- Business Intelligence and Business Analysis
- Mobility

Conclusions

State CIOs are changing

- How they provide services
- The Source and diversity of their revenue streams
- Their relationship with the legislature
- How mobile devices and apps connect citizens to their government



NASCIO Conference 2011



NASCIO Top Ten Strategy Priorities (2012)

1. Consolidation / Optimization
2. Budget and Cost Control
3. Governance
4. Health Care
5. Cloud Computing
6. Security
7. Broadband and Connectivity
8. Shared Services
9. Portal
10. Mobile Service/Mobility

NASCIO Top Ten Technology Priorities (2012)

1. Virtualization
2. Legacy application modernization/ renovation
3. Cloud computing
4. Mobile workforce technologies
5. Networking
6. Enterprise Resource Management (ERP)
7. Identity and access management
8. Business Intelligence (BI) and Business Analytics (BA) applications
9. Document/Content/Records/E-mail management
10. Public Safety Radio Network



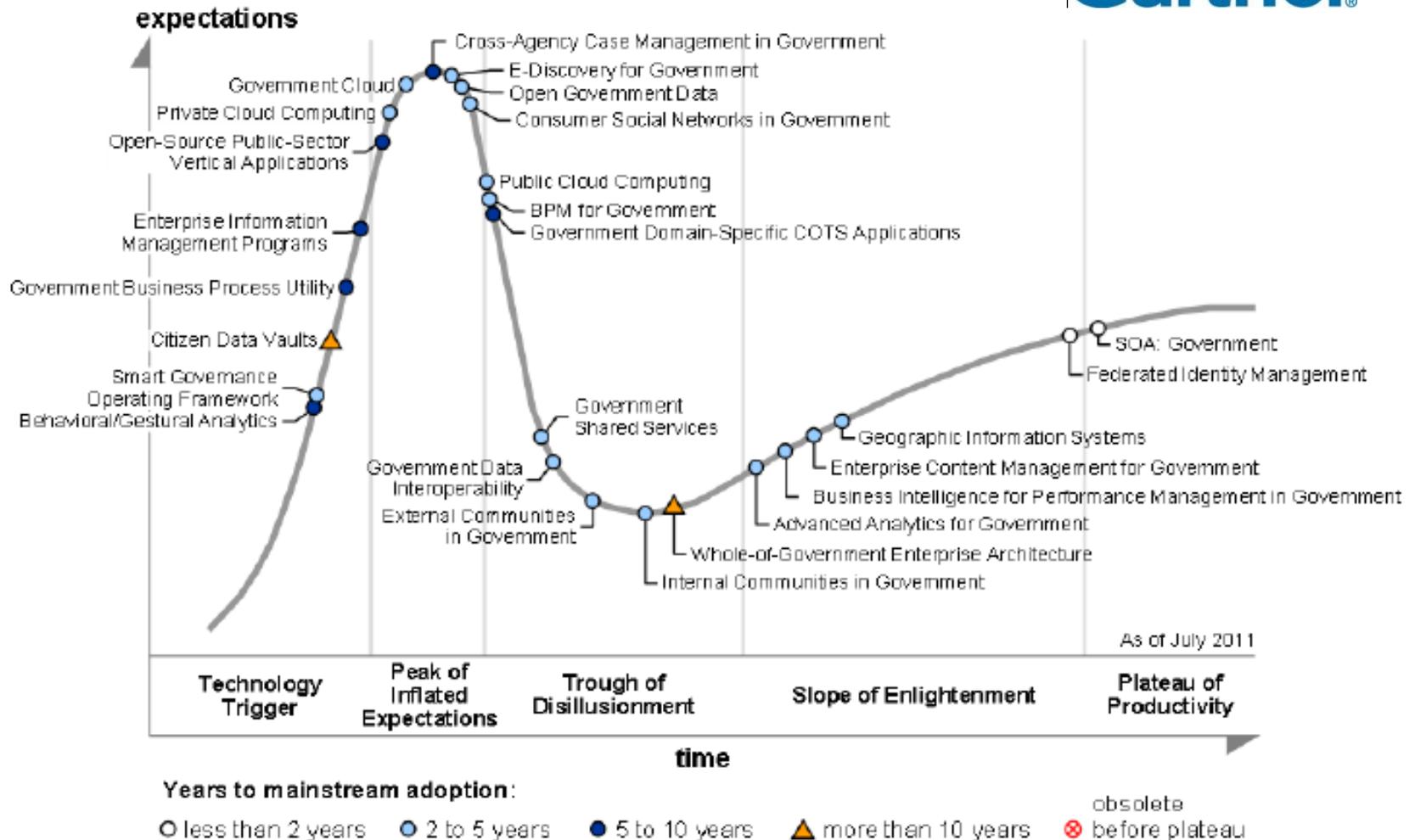
Source: <http://www.nascio.org>



Hype Cycle for Government Transformation (2011)

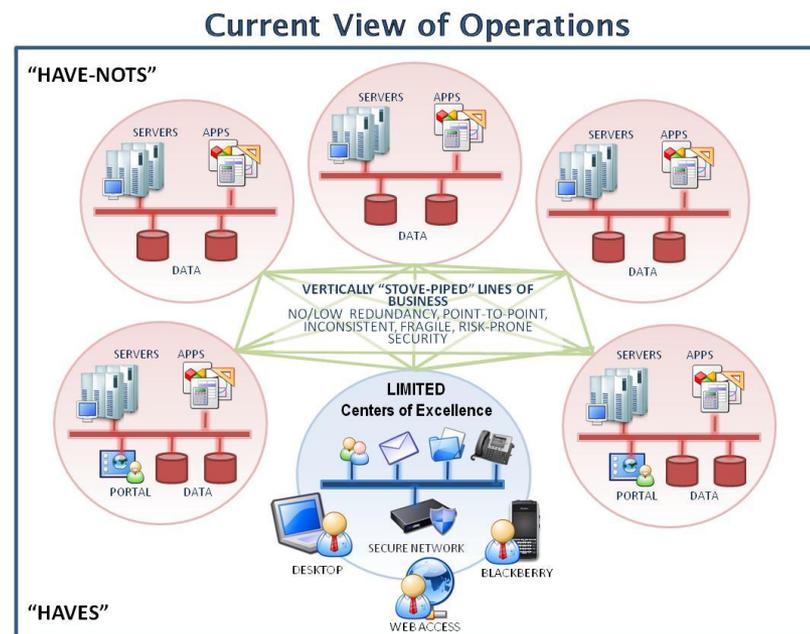


Figure 1. Hype Cycle for Government Transformation, 2011



Source: Gartner (July 2011)

- 18 Departments & University of Hawaii
- \$157.5 million IT/IRM budget
- 746 IT/IRM staff
- Over 500 applications
- 200 lines of business
- High duplication of effort
- Wide funding disparities
- Some focused areas of excellence



Many disconnected silos of effort



Widespread Symptoms of IT/IRM Management Challenges



- Inefficient manual interfaces
- Minimal enterprise integration and sharing
- Narrowly-focused federally funded solutions
- Limited use of IT/IRM to enable mission service delivery
- Aging legacy systems conditions (20+ years old)
- Proliferation of any and every type of IT/IRM product and service
- Little business process coordination or information sharing across departments (and programs)

A clear need for transformation!



Symptoms Driven by Three Root Causes



- 1) No coordinating authority for managing information resources and technology across the State
- 2) Lack of cross-cutting business process re-engineering (BPR)
- 3) Deep cuts in resources and budget reductions in the State over the past decade

Major issues exist – but all are solvable!



20 Key Recommendations

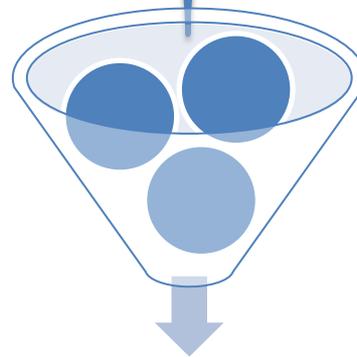


Business Reference Model
 Manual Interfaces
 Risk Assessments
 Performance Measures
 Funding for IT
 Agency Model

Data Sharing and Collaboration
 Bargaining Unit Leadership
 Service Management Model
 Application Integration
 Platforms and Technologies

Organizational Change
 ICSD
 Applications Portfolio
 Data Architecture
 IT Costs
 IT Skills

20



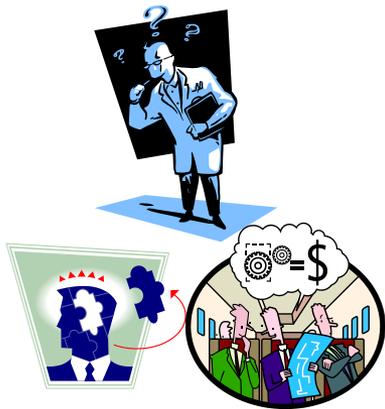
All recommendations are important but must be sequenced according to resources and readiness

4

Enterprise Focus
 Governance Strategies
 Business Process Re-Engineering
 Technical Foundation

We must start implementing 4 basic foundational recommendations now!

1



*Enterprise
Focus for
Projects*

2



*Establish
Enterprise
Governance*

3



*Re-engineer
Business
Processes*

4



*Strengthen
Technical
Infrastructure*

Re-engineer processes that are:

- Performed by multiple Departments
- Paper-driven
- Shareable across a foundational, enterprise IT infrastructure
- Extraordinarily labor-intensive and therefore drive users to create one-off solutions



Don't just automate inefficient processes...re-engineer them!



Prioritized BPR Process Areas



Candidates for Cross-Cutting Enterprise Solutions	Immediate-Term	Near-Term	Long-Term
Financial Management Initiatives	✓		
Procurement and IT Acquisitions	✓		
Program/Project Management Process Definition	✓		
Time and Attendance Reporting	✓		
Check Printing and Processing	✓		
Legislative Bill Tracking	✓		
Constituent Response Tracking	✓		
Data Entry	✓		
Enterprise Email Solution	✓		
Inventory/Asset Management		✓	
Document Tracking and Records Management		✓	
Neighbor Island Solution		✓	
PPACA Implementation		✓	
Longitudinal Data Enterprise Solution		✓	
Federal Grant Application and Lifecycle Management			✓
GIS Enterprise Solution			✓

Lay the groundwork for efficient delivery of services statewide



The Way Forward

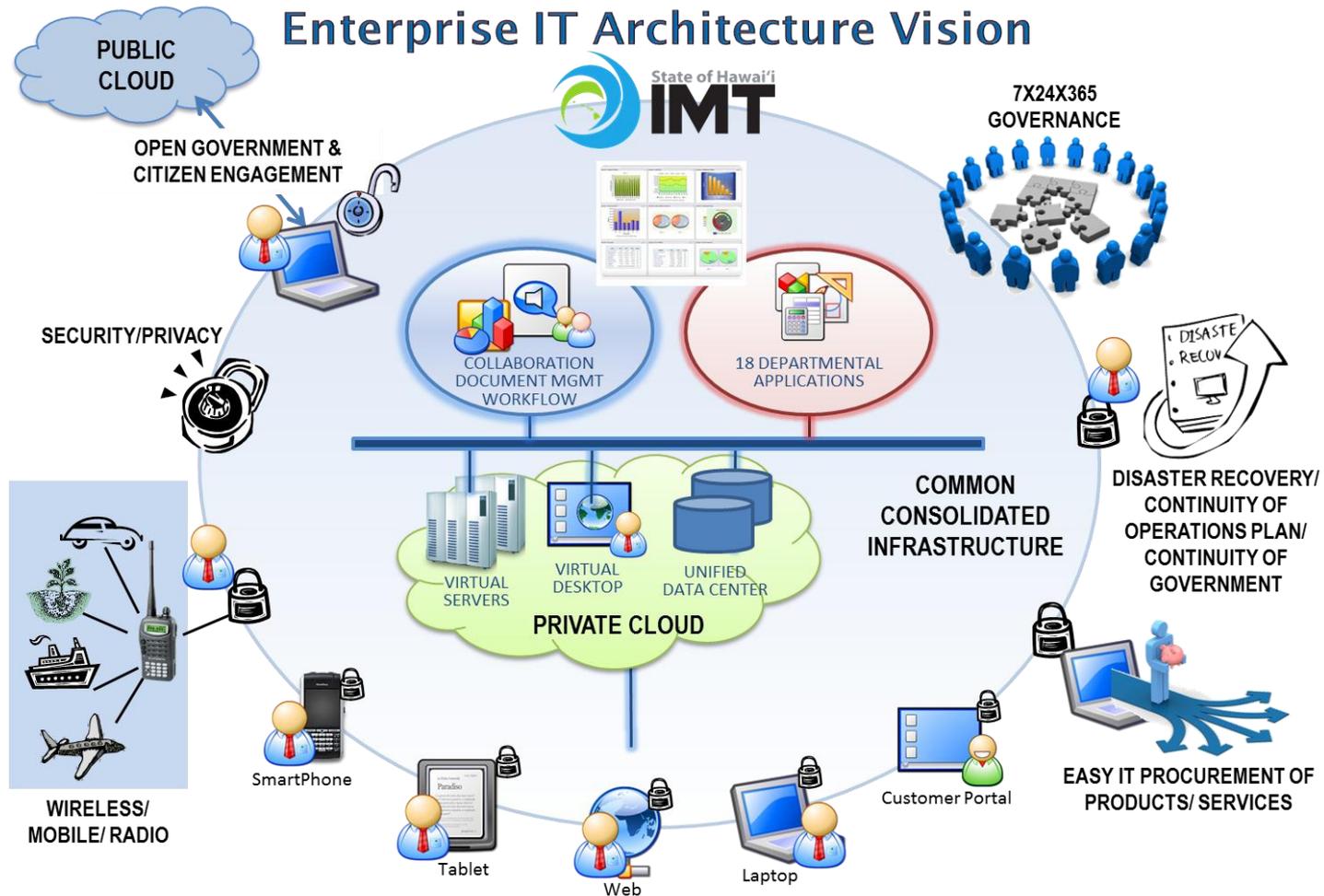




Vision



Preliminary Future Enterprise IT Architecture Vision



Access to the right information – anywhere, any time, any mission, securely and reliably

Transformation Framework

Management and Oversight (Governance)

1

State of Hawai`i Business and IT/IRM Transformation Strategic Plan

2



Enterprise Architecture

3



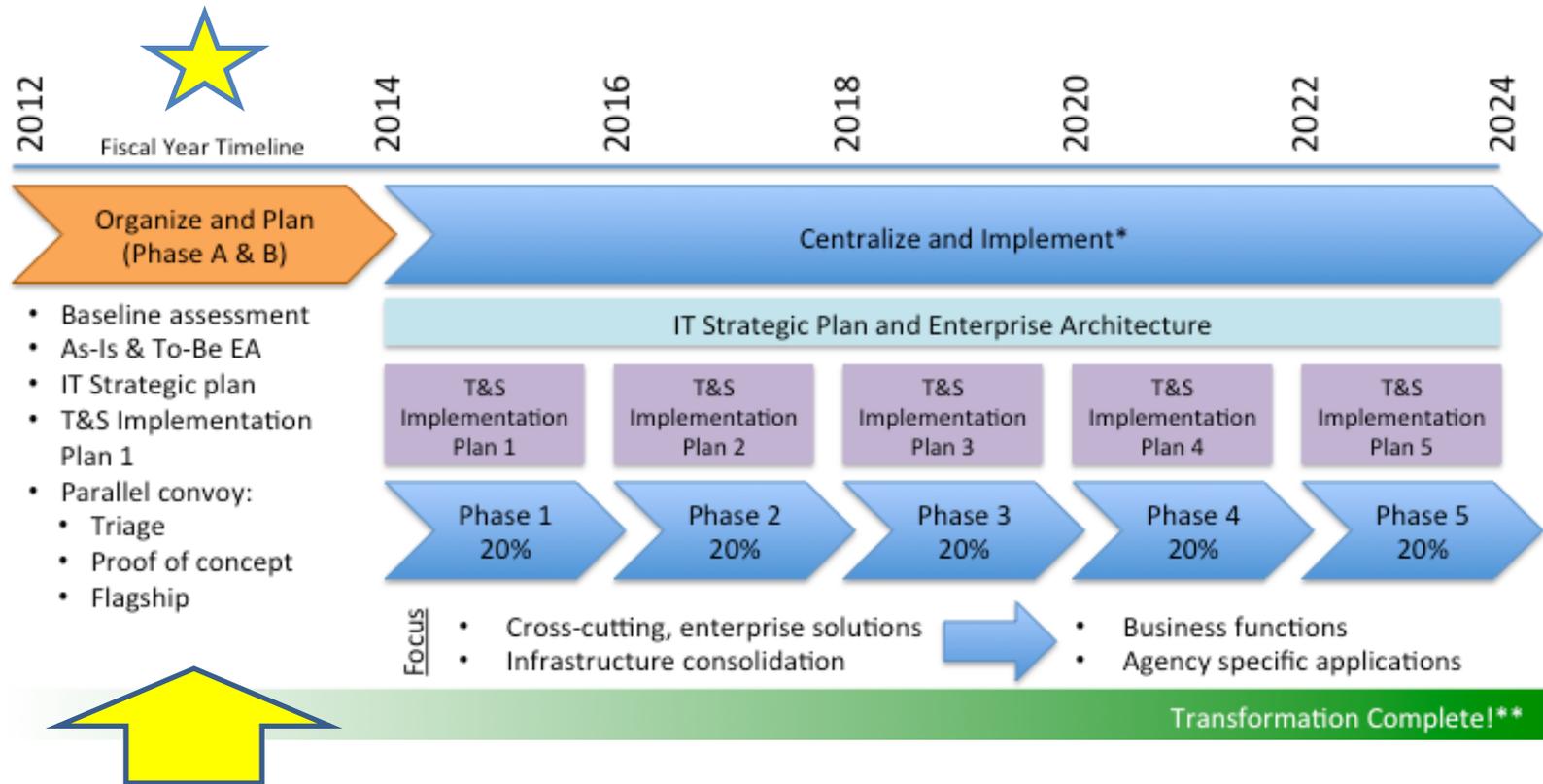
4



You will see incremental improvements and delivery



The Transformation Plan



*Successful implementation of Centralize and Implement Phases dependent on funding

**State will pursue continuous improvement and innovation during and after the transformation

A Seven-Phase, Eleven-Year Plan with delivery along the way



Presidential Initiative: Recovery.Gov



FRIDAY, APRIL 24, 2009 Text A* A* A

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Impact of the American Recovery and

IN THIS SECTION
[State Certifications](#)

Accountability and Transparency
This is your money. You have a right to know where it's going and how it's being spent. Learn what steps we're taking to conduct oversight of funds distributed under this law in order to prevent fraud, waste and abuse.

Share your Recovery Story
Tell us how the Recovery Act is affecting you. What's working? What isn't? We want to hear from you.

State Progress and Resources
Curious about the recovery progress in your state? Learn more about statewide recovery efforts here.

Agency Progress and Resources
We're bringing transparency and accountability to all areas of government. Learn about Recovery investments and grant programs at government agencies and departments.

View Territory Recovery Sites: [American Samoa](#), [Guam](#), [Puerto Rico](#)

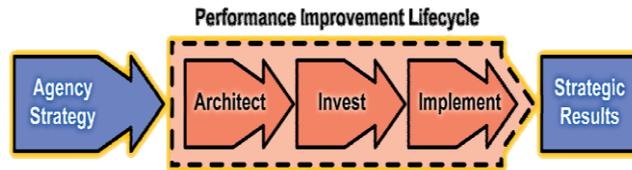
[Show Tabular View](#)

Geospatial Data is being used to add value to Recovery.Gov!



But, New Open and Transparent Government requirement, Social Media, New FOIA policies will require new balances.....Open Data and encrypt, protect only what you must....





**Stove-Piped,
Sub-optimized,
IRM and IT
Environment
(Today)**



**Geo-enabled,
Integrated,
Mobile,
Transparent, Web-
Accessible, Open,
Standards-based,
Agile,
Reliable,
Available, Secure
Enterprise
Information and IT
Environment
(Goal)**

**We are at a Crossroad in History –
Let's Choose the Pathway to Success!**



INNOVATION
SUCCESS
EVALUATION
DEVELOPMENT
GROWTH
SOLUTION
PROGRESS
MARKETING

Mahalo!

<http://www.hawaii.gov/oimt>
oimt@hawaii.gov

